WHAT IS CLAIMED IS:

1. A power transmission system comprising:

a speed reducing mechanism for speed-reducing drive power of an electric motor;

a differential apparatus for distributing speed-reduced drive power to axle ends; and

a clutch configured for interruptive transmission of drive power between the speed-reducing mechanism and the differential apparatus.

2. A power transmission system according to claim 1, further comprising:

a main drive power source; and

the electric motor used as an auxiliary drive power source relative to the main drive power source.

3. A power transmission system according to claim 1, wherein the speed-reducing mechanism comprises a plurality of reduction gear sets including a first reduction gear set for inputting thereto drive power from the electric motor, the first reduction gear set comprising a planetary gear.

4. A power transmission system according to claim 3, wherein the speed-reducing mechanism is provided with an oil pump for supplying lubricant to the planetary gear.

5. A power transmission system according to claim 4, wherein the oil pump is provided on a lid side of a case.

6. A power transmission system according to claim 1, wherein the speed-reducing mechanism comprises a plurality of reduction gear sets, and the clutch is disposed in a power transmission path of the speed-reducing mechanism.

7. A power transmission system according to claim 6, wherein the speed-reducing mechanism and the differential apparatus are neighbored to each other, and the clutch is coaxially provided to one of the plurality of reduction gear sets of the speed-reducing mechanism that is nearest to the differential apparatus.

8. A power transmission system according to claim 1, wherein the speed-reducing mechanism and the differential apparatus are integrally arranged in a casing.

9. A power transmission system according to claim 8, wherein a final reduction gear set and a previous reduction gear set relative thereto are axially neighbored to each other.

10. A power transmission system according to claim 9, wherein the previous reduction gear set is disposed on an axially one side of the final reduction gear set, and the differential apparatus is disposed on an axially opposite side of the final reduction

gear set.

11. A power transmission system according to claim 10, wherein the clutch is coaxially neighbored, at an axially outer side, to the differential apparatus.

12. A power transmission system according to claim 7, wherein the plurality of reduction gear sets of the speed-reducing mechanism is provided near a differential center of the differential apparatus.

13. A power transmission system according to claim 1, wherein the clutch comprises a frictional clutch.

14. A power transmission system according to claim 13, wherein the frictional clutch comprises a multi-plate clutch.

15. A power transmission system according to claim 13, wherein the frictional clutch comprises a cone clutch.

16. A power transmission system according to claim 1, wherein the clutch comprises a meshing clutch.

17. A power transmission system according to claim 16, wherein the meshing clutch comprises a dog clutch.

18. A power transmission system according to claim 1, wherein the clutch comprises a one-way clutch.

19. A power transmission system according to claim 1, wherein the clutch comprises a two-way clutch in which canceling directions of relative rotations are switchable.

20. A power transmission system according to claim 1, wherein the clutch comprises a centrifugal clutch.

21. An operation method for a power transmission system according to claim 16, the method comprising the step of canceling connection of the clutch, switching a rotating direction of the electric motor, thereby causing a contact portion of the clutch to vibrate so that the contact portion has a reduced frictional resistance.

22. An operation method for a power transmission system according to claim 16, the method comprising the step of canceling connection of the clutch, changing a revolution number of the electric motor so that a contact portion thereof has a reduced frictional resistance.

23. An operation method for a power transmission system according to claim 18, the method comprising the step of canceling connection of the clutch, switching a rotating direction of the electric motor, thereby causing a contact portion of the clutch to vibrate so that the contact portion has a reduced frictional resistance.

24. An operation method for a power transmission system according to claim

18, the method comprising the step of canceling connection of the clutch, changing a revolution number of the electric motor so that a contact portion thereof has a reduced frictional resistance.

25. An operation method for a power transmission system according to claim 19, the method comprising the step of canceling connection of the clutch, switching a rotating direction of the electric motor, thereby causing a contact portion of the clutch to vibrate so that the contact portion has a reduced frictional resistance.

26. An operation method for a power transmission system according to claim 19, the method comprising the step of canceling connection of the clutch, changing a revolution number of the electric motor so that a contact portion thereof has a reduced frictional resistance.

27. An operation method for a power transmission system according to claim 20, the method comprising the step of canceling connection of the clutch, switching a rotating direction of the electric motor, thereby causing a contact portion of the clutch to vibrate so that the contact portion has a reduced frictional resistance.

28. An operation method for a power transmission system according to claim 20, the method comprising the step of canceling connection of the clutch, changing a revolution number of the electric motor so that a contact portion thereof has a reduced frictional resistance.